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UNITED STATES OF AMERICA
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268-0001

Periodic Reporting
(Proposal Thirteen)

Docket No. RM2015-7

CHAIRMAN'S INFORMATION REQUEST NO. 3

(Issued March 20, 2015)

To clarify the Postal Service's petition to consider changes to analytical principles, filed December 11, 2014, the Postal Service is requested to provide a written response to the following questions.[1] The responses should be provided by March 27, 2015.

1. Please refer to the Response to CHIR No. 1, question 21, which states "the average elapsed time for the delivery activities being studied…would be measured by the average of the elapsed time between begin activity scan and the mode scan (which was also the end activity scan)."[2]

   a. Please explain whether total parcel time for in-receptacle, deviation, and accountable parcels in the SAS program "cost pools parcel acct time.sas" includes both the time for the parcel study scans (scan time) and delivery time.[3] Please discuss the differentiation between parcel study scan times and normal delivery scan times, such as barcode tracking scans, during the study.

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[1] *See* Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Change in Analytical Principles (Proposal Thirteen), December 11, 2014.

[2] Response of the United States Postal Service to Questions 1-16 and 19-28 of Chairman's Information Request No. 1 (CHIR No. 1), January 12, 2015 (Response to CHIR No. 1, question 21).

[3] *See* Library Reference Postal Service RM2015-7/1, Public Material Supporting Proposal Thirteen (USPS-RM2015-7/1), Cost Pool Formation Directory, SAS Program folder.

b. If total parcel delivery time used to form the parcel time pool shares does not include scan time, please provide a detailed explanation, along with supporting programs, data, and documentation, of the means by which scan time was removed.

c. If scan time was not removed from the total parcel time pools, please provide a revised version of the calculation of the time pool shares with the scan time removed.

2. Please refer to Library Reference USPS-RM2015-7/1, Report on the City Carrier Street Time Study,[4] at 45, which states that "the composite stochastic term is not correlated with the right-hand-side variables in the regression: [formula omitted]."

a. Please explain whether any statistical tests were performed to verify this statement. If so, please provide copies of the programs, logs, and output if all are available, or the programs and output if the logs are not available.

b. If statistical tests were not performed to verify that the composite stochastic term is not correlated with the right-hand variables in the regression, please explain the reasoning which led to the stated conclusion. For example, please explain how it was determined that Allied Time is not positively or negatively correlated with regular delivery volume, and thus would not result in a correlation of the stochastic error term and regular delivery volumes.

3. Please refer to the SAS program "estim variab reg del time.sas."[5] The SAS code that creates the variable for delivery time (delivery_hrs = street_hours – allied_hours_3999) does not appear to subtract in-receptacle parcel delivery time from each observation.

a. Please explain whether in-receptacle parcel delivery time is included in the delivery time used in the regular delivery regression. If it is not included,

[4] *See id*., Letter_Route Report directory.

[5] *See id*., Regular Delivery Equation directory, SAS Programs.

please explain how in-receptacle delivery time was removed from regular delivery time and provide the program(s) which removed in-receptacle delivery.

b. If in-receptacle delivery time is included in delivery time, please discuss the econometric implications for the shape parameter estimates in the regular delivery equation, including a discussion of the way in which shape variabilities would change.

4. Please refer to the SAS program "cost pools regular delivery time.sas," which estimates the time pool shares of regular delivery, relay, travel to/from, network travel, and blue box collection time.[6]

a. Please confirm that removing observations with unreasonable delivery times was limited to observations with gross street time greater than 12 hours, negative gross street time, or negative sector segment, parcel, accountable, relay, travel to/from, travel within, or blue box collection time.

b. Please confirm that observations with very short delivery times, *e.g.*, 1 hour or less, were not removed from the formation of the regular delivery time pool.

c. If question 4b. is confirmed, please explain why observations with very short delivery times were not removed. As part of the response, please explain why observations with unreasonably high delivery times were deleted but observations with very short delivery times were not deleted.

d. If question 4b. is not confirmed, please identify the program in which observations with very short delivery times were removed.

e. If the program was not filed, please provide the programs, output and logs (if available), along with supporting documentation.

[6] *See id*., Cost Pool Formation directory, SAS Programs folder.

5. Please refer to the SAS program "estim variab reg del time.sas."[7]

   a. Please confirm that data step "a2" (data a2) treats observations with negative Allied Time as having zero Allied Time.

   b. If question 5a. is confirmed, please explain why these observations were adjusted, as opposed to being deleted.

   c. If question 5a. is not confirmed, please explain.

6. Please refer to the file "Form 3999 Activities.xlsx."[8]

   a. Please confirm that the activities are included in Allied Time are: RELAY_HOURS_3999, TRAVEL_TO_HOURS_3999, TRAVEL_FROM_HOURS_3999, VEHICLE_LOAD_HOURS_3999, VEHICLE_UNLOAD_HOURS_3999, TRAVEL_WITHIN_HOURS_3999, ACCOUNTABLE_HOURS_3999, PARCEL_HOURS_3999, STREET_BREAK_HOURS_3999, BLUE_COLLECT_HOURS_3999, DEADHEAD_HOURS_3999, PERS_HOURS_3999, CUST_CONT_HOURS_3999, GAS_VEHICLE_HOURS_3999, BACKTRACK_HOURS_3999, ANIMAL_HOURS_3999, WAIT_RELAY_HOURS_3999, WAIT_TRANS_HOURS_3999, WAIT_OTHER_HOURS_3999, TEMP_DETAIL_HOURS_3999, MGMT_HOURS_3999, ACCIDENT_HOURS_3999, MISC_OTHER_HOURS_3999.

   b. If question 6a. is not confirmed, please list the activities which comprise Allied Time, and provide a revised version of the file which calculates the sum of time of these activities for each observation which ensures this sum of Allied Time is equal to the hard-coded value of Allied Time for each observation.

[7] *See* Library Reference USPS-RM2015-7/1, Public Material Supporting Proposal Thirteen, Regular Delivery Equation, SAS Programs folder.

[8] *See id*., Cost Pool Formation directory, Form 3999 Excel File folder.

c. Please confirm that Gross Street time is Sector Segment Time plus Allied time.

d. If question 6c. is not confirmed, please explain.

7. Please list the activities which comprise Delivery Operations Information Street (DOIS) street times in the Excel files “Package Study DOIS Masked ZIPS.xlsx" and “CCCS FRAME DOIS STUDY ZIPS.xlsx.”[9]

8. Please refer to file “estim_variab_reg_del_time,” line 941, which defines delivery time as the difference between street and allied time.[10] Please explain if Vehicle Load/Unload time is considered as Office time or Street time as part of the daily DOIS route data used in the regular delivery model.

9. Please refer to the SAS log “estim variab reg del time,” which estimates the variability of regular delivery mail shapes, at line 1049.[11]

a. Please confirm that the square of the Flats Sequencing System (FSS) volume variable is not included in the regression model.

b. If question 9a. is not confirmed, please identify the line where the variable is included.

c. If question 9a. is confirmed, please explain the reason the squared term for FSS was not included in the regular delivery regression model.

d. Please file a revised program, log, and output if the squared FSS term was meant to be included in the regular delivery equation, and file a revised version of the file “Cost Impacts Proposal 13.xlsx" if regular delivery variabilities differ from those filed with the Commission.[12]

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[9] *See id.*, Cost Pool Formation directory, Package Study DOIS Excel File folder and Regular Delivery Equation folder, Frame DOIS Excel File.

[10] *See id*., Regular Delivery Equation directory, SAS Logs folder. *See also* Response to CHIR No. 1, question 7a., which states “vehicle load and unload time is considered office time in the city carrier model….”

[11] *See id*., Regular Delivery Equation directory, SAS Logs folder.

[12] *See id*., Cost Impacts directory.

10. Please run the restricted regular delivery model (*i.e.*, a quadratic model without cross product terms) to facilitate an apples-to-apples comparison of the regular delivery model results with the "restricted" version of the regular delivery model, presented in witness Bradley's testimony in Docket No. R2005-1 at 38, Table 5.[13] Please provide a comparison of the estimated variabilities and marginal times from each restricted model. Please also provide copies of the restricted program, output and log. (Note: the comparable restricted version in this docket would not include the terms for small parcels).

11. Please refer to the file entitled "deviation acct variabilities model.sas."[14] Please explain how the upper limit for a reasonable parcel deviation of 5 minutes per piece and the upper limit for a reasonable accountable deviation of 10 minutes per piece were selected. Please include a discussion of the rationale for the difference between these upper limits, the frequency with which each type of deviation requires the carrier to move their vehicle, and the average amount of time it takes to move a vehicle for each type of deviation.

12. As shown in the SAS log "in_receptacle_variabilities_model.sas" at line 2810, the work.scan file used in the IR Parcel model contains 59,558 observations.[15] As shown in the SAS log "dev_acct_variabilities_model.sas" at line 2209, the work.scan file used in the Dev/ACCT model contains 59,434 observations.[16] Please explain why each work.scan data set contains a different number of observations.

By the Acting Chairman.

Robert G. Taub

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[13] Docket No. R2005-1, USPS-T-14, Testimony of Michael D. Bradley on Behalf of United States Postal Service, April 8, 2005.

[14] *See* Library Reference USPS-RM2015-7/1, Deviation Parcel Acct Equation directory, SAS Programs folder.

[15] *See id.,* In Receptacle Parcel Equation directory, SAS Logs folder.

[16] *See id*., Deviation Parcel Acct Equation, SAS Logs.